## We're not making this up



### Venting his spleen

Some people refer to John Moore as Spleenless in Seattle because his medical history is fraught with ironies that border on the ridiculous. Moore has become the central figure in an urban legend because a doctor patented a quirk in Moore's unusual genetic code. At least part of this urban legend is true.

Hank Greely, a professor of law at California's Stanford Law School, says Moore's spleen has become the poster child for the issue of commercialization involving genetic projects. He cites the case in every property and health law class he teaches. Legend has it that Dr. David Golde, a McGill graduate, recognized something of considerable value in Moore's spleen. He removed the organ and, according to lore, earned millions after he patented Moore's genetic code.

The reality is far less dramatic and much less lucrative. In fact, Moore had hairy cell leukemia, which was considered a mysterious form of cancer in the early 1970s. A splenectomy was performed because it was the only cure. Moore's spleen was severely abnormal, weighing in at an estimated 9 kg. And there was something else unusual about the case: his cancer was believed to be B-cell disease but 2 cell lines Golde cultured from Moore's spleen showed T-cell disease.

The greatest scientific achievement to come of the cell lines was the discovery of the second human retrovirus, human T-lymphotropic virus type 2 (HTLV-2), in 1992. Greely says Moore's leukemia expressed itself as T-cell disease because of the HTLV-2 infection.

Some drug companies were initially interested in the cells because of their association with cytokines, but pursued other avenues. Dr. Golde had some financial interests in the cell lines, but Greely said these were "never licensed, never sold, never used — no one ever made a dime off the patent." (UCLA didn't maintain the patent and the cells are now offered for sale through classified ads.)

Moore filed suit against Golde and UCLA in 1983. The case went to the California Supreme Court on a motion to dismiss and Moore accepted a settlement worth between \$200 000 and \$400 000. "Basically the court costs ate it up," Greely said.

Golde is now chief of staff at Memorial Sloan Kettering Cancer Center in Manhattan, while Moore works in sales and marketing with a Seattle Internet company. He experienced one recurrence of his leukemia, which is now considered one of the most curable types of cancer

Greely, who may cite the case in an upcoming book, related the strange facts during the Second International Conference on DNA Sampling in Edmonton this fall. He told conference goers he was honest with Moore when it came to disclosing financial interests. "I told Moore: 'I suppose I should tell you, given your history, that I could make money from this.' He said: 'Well, are you gonna give me some?' And I said: 'Well, that's not my plan at this time, but if you want to we can talk about it.'

"He just laughed and let it lapse." — © Richard Cairney



## King Tut's curse due to fatal spores?

A French scientist's research into the longevity of infectious microbes may have unlocked the secret of the Pharaoh's Curse. King Tut's curse is blamed for Lord Carnarvon's ago-

nizing death after he entered the 3200-year-old tomb of Pharaoh Tutankhamen on Nov. 26, 1922. The British adventurer, who financed archeologist Howard Carter's quest to find the tomb of the last king in the 18th dynasty in Egypt, may have fallen victim to a highly virulent disease that was lying dormant in the underground burial chamber for millennia.

Dr. Sylvain Gandon, a researcher at the Laboratoire d'Écologie in Paris, has shown that microscopic spores can become extremely potent and are capable of surviving for long periods outside a living host body. "The death of Lord Carnaryon could potentially be explained by infection with a highly virulent and very long-lived pathogen," says Gandon. His findings, which recently appeared in *Proceedings of the* Royal Society, support Sir Arthur Conan Doyle's conviction that Carnarvon died after breathing germs in Tutankhamen's burial chamber. Doyle, the creator of the Sherlock Holmes mysteries, suggested that spores were deliberately placed there by priests to punish grave robbers.

The fabulous riches in the tomb of Tutankhamen, who lived from 1370-52 BC, stunned the world when they were discovered 76 years ago. When Carnarvon died in a Cairo hospital on Apr. 23, 1923, after being the first man to enter the boy king's burial chamber, stories of the Pharaoh's Curse abounded.

Carnarvon's death certificate said he died of complications from an infected mosquito bite, but journalists speculated that besides its treasure, Tutankhamen's tomb contained a deadly poison. A number of other people who came into contact with King Tut's remains also met mysterious ends. American archeologists Arthur Mace and George Jay Gould both died within 24 hours of entering the tomb.

Archeologist Nicholas Reeves, author of *The Complete Tutankhamen*, said there were reports of a black fungus inside the tomb. Carnarvon was already in poor physical condition when he reached Egypt and could have suffered a fatal infection as a result.

"There are fungi that can survive in a peculiar environment like a tomb and could well have affected someone like him," Reeves says. He dismisses the idea of a curse, pointing out that if one existed, it spared the overwhelming majority of those most closely involved with the tomb exploration — including Carter, who died in 1939, and the man who performed an autopsy on the mummy.

Gandon's research explains the theoretical link between the virulence of a pathogen — a harmful bacterium, virus or fungus — and the length of time it is able to survive as a spore. But how did the spores get into the tomb in the first place? "If the Egyptians were smart and really wanted to make a curse," notes Gandon, "they could have taken a pathogen well known to them and put it in the tomb." — © Gil Kezwer

# Heard through the stethoscope

#### **Out-of-this-world salary**

How much money does a Canadian physician who flies into outer space earn? Probably not as much as you think. The federal government recently set astronaut salaries at a maximum of \$126 000 annually. Because of his experience, Marc Garneau stands to earn the maximum amount, as will Drs. Steve MacLean, Robert Thirsk, Bjarni Tryggvason and David Williams. Astronauts who have completed NASA training but

have yet to make the big trip, such as crew member Julia Payette, earn a maximum of \$107 100.

#### Viagra follies

Viagra is cropping up in the most unlikely places, including nightclubs and restaurants. The anti-impotence medication that quickly became the best-selling prescription drug in US history, is being sold illicitly in British nightclubs under the street name of "poke." Apparently both men and women are using the erection-enhancing medication.



### What's another word for . . . ?

Did you know that the English language offers 1400 synonyms for penis and more than 300 for breast? Dr. Allan Peterkin swears there are, and he should know. The Toronto psychiatrist, journalist and poet has researched and written the world's first English-language "erotic thesaurus." The Bald-Headed Hermit and The Artichoke: An Erotic Thesaurus, will be released as a 200-page reference book this spring by Vancouver's Arsenal Pulp Press.

The search for synonyms began as a joke after some of Peterkin's friends showed him some lists of sexual slang — he decided to search